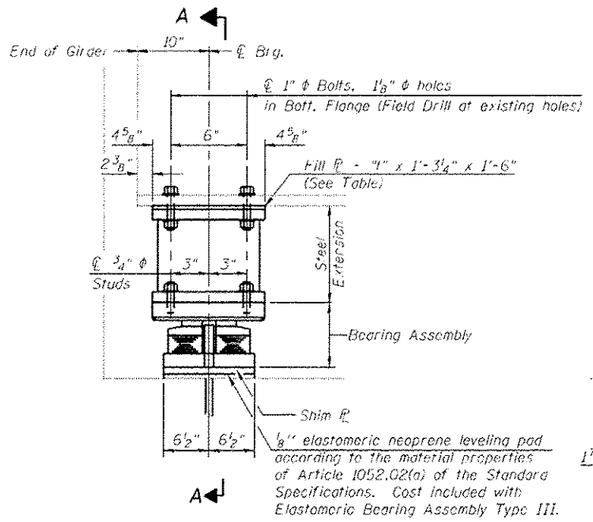
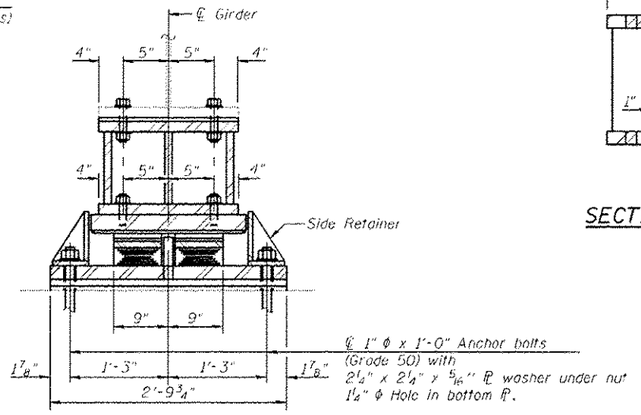
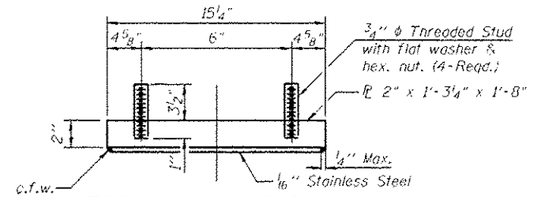


ELEVATION AT ABUT.

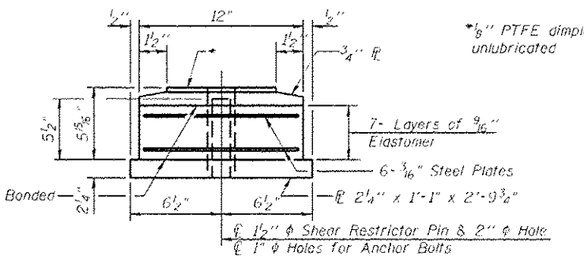


SECTION A-A

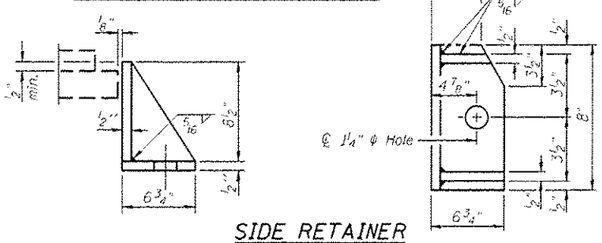
TYPE III ELASTOMERIC EXP. BRG. AT E. ABUT. S.B. & E. ABUT. N.B.



TOP BEARING ASSEMBLY



BOTTOM BEARING ASSEMBLY



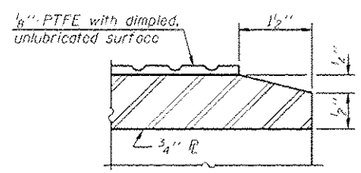
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

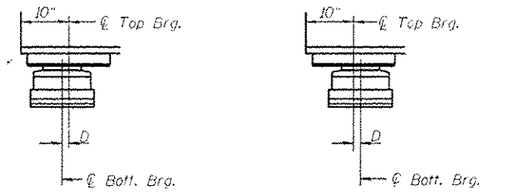
INTERIOR GIRDER REACTION TABLE

Location E. Abutment	
R_{ℓ} (K) (steel only)	18.1
R_L (K)	45.2
R_{IMP} (K)	8.2
R_{TOTAL} (K)	145.5
Min. Jack Capacity (T)	23

Min. Jack Capacity = $R_{\ell} + \frac{1}{2}(R_L + R_{IMP})$



SECTION THRU PTFE

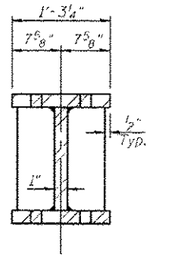


BELOW 50° F. (Move bottom brg. away from fixed brg.)

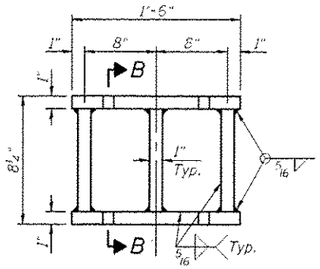
ABOVE 50° F. (Move bottom brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D = ⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

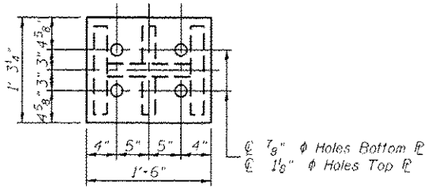


SECTION B-B

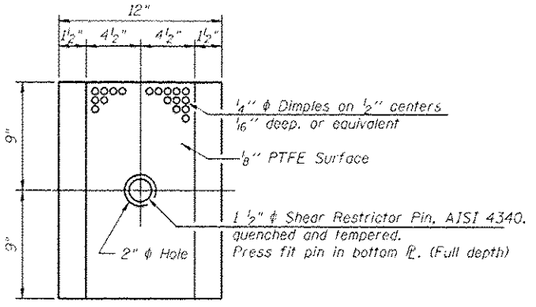


ELEVATION

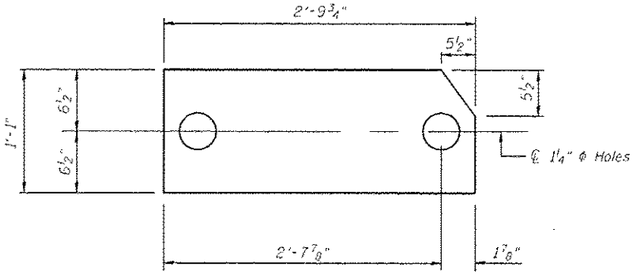
STEEL EXTENSION



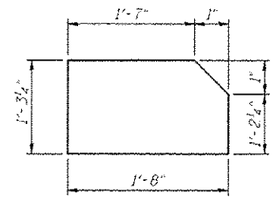
PLAN - TOP & BOTTOM



PLAN-PTFE ELASTOMERIC BRG.



BOTTOM BEARING PLATE PLAN



TOP BEARING PLATE PLAN

FILL "t" DIMENSIONS

S.B. Lanes	A	B	C	D	E	F	G
℄ Brg. E. Abut.	—	—	—	—	—	½"	—

N.B. Lanes	H	I	J	K	L	M	N
℄ Brg. E. Abut.	—	—	¼"	—	—	—	—

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for Type III bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type III.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Two ⅛" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown in the bearing details.

See Sheet 36 of 53 for existing Bearing Removal Detail.

BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	14
Anchor Bolts 1"	Each	28
Elastomeric Bearing Assembly Type III	Each	14
Furnishing and Erecting Structural Steel	Pound	3770

REV. SHEET 6-3-13

CEC Cummins Engineering Corporation — Civil and Structural Engineering

JOB • 2265.2 | DESIGNED - AAN | REVISED -
FILE • 054006O_8861-72E11-36-37-Bearings.dgn | CHECKED - MDC | REVISED -
DATE • 5/14/2013 | DRAWN - SJS | REVISED -
CHECKED - MDC | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPE III BEARING DETAILS AT EAST ABUTMENTS
STRUCTURE NO. 054-0060 (SB) & STRUCTURE NO. 054-0061 (NB)
SHEET NO. 37 OF 53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	06 LOGAN CO BR 2011-1	LOGAN	429	267
		CONTRACT NO. 72E11		
		ILLINOIS FED. AID PROJECT		